

Course Title:	Endocrine and Metabolism
Course Code:	ENDO412
Program:	Bachelor of Medicine and Bachelor of Surgery (MBBS)
Department:	Basic Medical Sciences
College:	College of Medicine
Institution:	AlMaarefa University

Course Identification

1. Credit hours: 6 hours								
2. Course type								
a.	University	<input type="checkbox"/>	College	<input checked="" type="checkbox"/>	Department	<input type="checkbox"/>	Others	<input type="checkbox"/>
b.	Required	<input checked="" type="checkbox"/>	Elective	<input type="checkbox"/>				
3. Level/year at which this course is offered: Year 3 - Level 6								
4. Pre-requisites for this course (if any): ANAT214 – PHSL215 – PATH216 Blocks								
5. Co-requisites for this course (if any): None								

Course Objectives

1. Course Description ENDO 412 block is a seven weeks (Week 1-7) course on the endocrine system. The course imparts an understanding of related endocrine glands, their normal function, major pathologies, and pharmacologic principles of major drugs associated with the endocrine system. This block deals with the anatomy, embryological development, physiology, metabolism, investigations, and therapeutic lines of common diseases in the endocrine system.
2. Course Main Objective <i>By the end of this block, students should be able to:</i> <ul style="list-style-type: none"> Outline the general aspects endocrine system as regards concepts of classifications of hormones, overall endocrine system functions, mechanisms of action of hormones, hormonal levels, and tissue responses with reference to impacts on understanding endocrinal dysfunctions. Recognize the anatomical, histological, embryological, and physiological aspects of the pituitary gland and its hormones Describe the biochemical and pathological concepts of diseases of the pituitary gland with reference to impacts on clinical aspects

- Recognize the pharmacological aspects of synthetic pituitary hormones
- State the anatomical, histological, embryological physiological aspects of the thyroid gland and its hormones.
- Outline the biochemical, immunological, and pathological concepts of diseases of the thyroid gland with reference to impacts on clinical aspects
- Recognize the pharmacological aspects of the treatment of diseases of the thyroid gland.
- Understand the main concepts of the roles of the endocrine system in calcium homeostasis
- Describe the biochemical and clinical implications of disturbances in calcium homeostasis.
- Recall the anatomical, histological, embryological physiological aspects of the suprarenal glands and their hormones.
- Understand the biochemical, immunological, and pathological concepts of diseases of the suprarenal glands with reference to impacts on clinical aspects
- Recognize the pharmacological aspects of synthetic corticosteroids
- Understand the role of the endocrine system in the metabolic regulation of fed/fast cycle
- Identify the physiological and biochemical aspects of the endocrine pancreas and its hormones (insulin and glucagon hormones).
- Recognize the biochemical, immunological, pathological, and pharmacological aspects of type 1 and type 2 diabetes mellitus and their complications with emphasis on their impact on clinical features, diagnosis, and management.
- Describe the biochemical, genetic, and clinical aspects of obesity and metabolic syndrome